

REMARKS

Claims 1-4, 6-18, and 20-21 are pending. By this amendment, claims 1, 9, 16, and 21 are amended. No new matter is introduced. Support for the amendments may be found at least in at page 4, lines 11-12 of the specification. Reconsideration and allowance of all pending claims is respectfully requested in view of the preceding amendments and following remarks.

Specification Objections

The specification is objected to because of informalities. The specification has been amended to correct the informalities. Withdrawal of the specification objections is respectfully requested.

Claim Rejections Under 35 U.S.C. §112

Claims 1 is rejected under 35 U.S.C. §112, second paragraph. Claim 1 has been amended to remove the term "short." Withdrawal of the rejection of claim 1 under 35 U.S.C. §112 is respectfully requested.

Claim Rejections Under 35 U.S.C. §103

Claims 1-4, 6-18, and 20-21 are rejected under 35 U.S.C. §103 (a) over U.S. Patent 4,841,476 to Mitchell et al. (hereafter Mitchell) in view of Banks "Handbook of Simulation" (hereafter Banks) and further in view of U.S. Patent 5,202,889 to Aharon et al. (hereafter Aharon). This rejection is respectfully traversed.

Mitchell is directed to a system that emulates execution of source CPU instructions. Banks defines validation as the determination that the conceptual model is an accurate representation of the real system. Aharon discloses a dynamic process for the generation of biased pseudo-random test patterns for the functional verification of integrated circuit designs. Mitchell, Banks, and Aharon, individually and in combination, do not disclose or suggest "the verification engine pinpoints an exact machine instruction, a register number, and an input machine state that caused the emulation failure," as recited in amended claim 1. Since Mitchell, Banks, and Aharon, individually and in combination, do not disclose or suggest all of the elements of amended claim 1, claim 1 is allowable.

Claims 2-4 and 6-8 are allowable because they depend from allowable claim 1 and for the additional features they recite.

Likewise, Mitchell, Banks, and Aharon, individually and in combination, do not disclose or suggest "pinpointing an exact machine instruction, a register number, and an input machine state that caused the emulation error," as recited in amended claim 9. Since

Mitchell, Banks, and Aharon, individually and in combination, do not disclose or suggest all of the elements of amended claim 9, claim 9 is allowable.

Claims 10-15 are allowable because they depend from allowable claim 9 and for the additional features they recite.

Similarly, Mitchell, Banks, and Aharon, individually and in combination, do not disclose or suggest "pinpointing an exact machine instruction, a register number, and an input machine state that caused the emulation failure," as recited in amended claim 16. Since Mitchell, Banks, and Aharon, individually and in combination, do not disclose or suggest all of the elements of amended claim 16, claim 16 is allowable.

Claims 17-18 and 20 are allowable because they depend from allowable claim 16 and for the additional features they recite.

Likewise, Mitchell, Banks, and Aharon, individually and in combination, do not disclose or suggest "pinpointing an exact machine instruction, a register number, and an input machine state that caused the emulation failure," as recited in amended claim 21. Since Mitchell, Banks, and Aharon, individually and in combination, do not disclose or suggest all of the elements of amended claim 21, claim 21 is allowable. Withdrawal of the rejection of claims 1-4, 6-18, and 20-21 under 35 U.S.C. §103 is respectfully requested.

In view of the above remarks, Applicant respectfully submits that the application is in condition for allowance. Prompt examination and allowance are respectfully requested.

Should the Examiner believe that anything further is desired in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,



Kelly T. Lee
Registration No. 47,743
Andrews Kurth LLP
1701 Pennsylvania Ave, N.W.
Suite 300
Washington, DC 20006
Tel. (202) 662-2736
Fax (202) 662-2739

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